

## CLAIMS:

1. A method of placing a transponder (1) or an integrated circuit (2) contained in the transponder (1) in an inventory in a communication station, wherein an inventory-making process is activated in the transponder (1) or in its integrated circuit (2), in which inventory-making process a part (byte x) of a distinguishing dataset (SN) of the transponder or its  
5 integrated circuit, which distinguishing dataset (SN) is stored in storage means (16) of the transponder or its integrated circuit and is characteristic for the transponder or its integrated circuit, is read from the storage means (16) by using a hash value (HV), and in which inventory-making process a transmission parameter ("7") is selected from a set of transmission parameters by using the part (byte x) that was read from the distinguishing  
10 dataset (SN), and in which inventory-making process an identifying dataset (SN) for the transponder or its integrated circuit, which identifying dataset (SN) is characteristic for the transponder or its integrated circuit and is intended for the placing of the transponder or its integrated circuit in an inventory, is transmitted from the transponder or its integrated circuit to the communication station by using the selected transmission parameter ("7"), characterized  
15 in that the hash value (HV) is generated in the transponder (1) or in its integrated circuit (2) by means of hash-value generating means (20) that are provided in the transponder (1) or in its integrated circuit (2).
2. A method as claimed in claim 1, characterized in that, in the inventory-making  
20 process, a time slot ("7") is selected from a time-slot sequence by using the part (byte x) of the distinguishing dataset (SN) that has been read out, and in that, in the inventory-making process, the identifying dataset (SN) for the transponder (1) or its integrated circuit (2) is transmitted from the transponder or its integrated circuit to the communication station by using the selected time slot ("7").
- 25 3. A method as claimed in claim 1, characterized in that the hash value (HV) is generated by means of a hash-value counting stage (20) provided in the transponder (1) or in its integrated circuit (2).

4. A method as claimed in claim 3, characterized in that the hash-value counting stage (20) is set to a preset starting hash value (SHV) after a power-on reset in the transponder (1) or in its integrated circuit (2).

5. A method as claimed in claim 1, characterized in that the hash value (HV) is generated by means of a random number generator provided in the transponder (1) or in its integrated circuit (2).

6. An integrated circuit (2) for a transponder (1), which integrated circuit (2) contains process-controlling means (14) that are intended for controlling an inventory-making process for placing the integrated circuit or the transponder containing the integrated circuit in an inventory in a communication station, and which integrated circuit (2) contains storage means (16) that are intended firstly to store a distinguishing dataset (SN) of the integrated circuit (2) or the transponder containing the integrated circuit (2), which distinguishing dataset (SN) is characteristic for the integrated circuit or the transponder containing the integrated circuit, and secondly to store an identifying dataset (SN) of the integrated circuit or the transponder containing the integrated circuit, which identifying dataset (SN) is characteristic for the integrated circuit or the transponder containing the integrated circuit and is intended for placing the integrated circuit or the transponder containing the integrated circuit in an inventory, and which integrated circuit (2) includes transmission-parameter selecting means (31) that are intended firstly to receive a part (byte x) of the distinguishing dataset (SN) that is read from the storage means (16) by using the hash value (HV), and secondly to select a transmission parameter ("7") from a set of transmission parameters by using the part (byte x) of the distinguishing dataset (SN) that has been received, which selected transmission parameter ("7") is suitable for transmitting, from the integrated circuit to the communication station, the identifying dataset (SN) that is intended for placing the integrated circuit or the transponder containing the integrated circuit in an inventory, characterized in that hash-value generating means (20) for generating the hash value (HV) are provided in the integrated circuit (2).

7. A circuit (2) as claimed in claim 6, characterized in that the integrated circuit (2) contains, as transmission-parameter selecting means (31), time-slot selecting means (31), which time-slot selecting means (31) are designed to select a time slot ("7") from a time-slot sequence, which selected time slot ("7") is suitable for transmitting, from the integrated

circuit (2) to the communication station, the identifying dataset (SN) intended for the placing of the integrated circuit (2) or the transponder (1) containing the integrated circuit (2) in an inventory.

5 8. A circuit (2) as claimed in claim 6, characterized in that the hash-value generating means (20) provided in the integrated circuit (2) are implemented with the help of a hash-value counting stage (20).

10 9. A circuit (2) as claimed in claim 8, characterized in that a power-on-reset circuit (12) is provided that is designed to generate a power-on-reset signal (POR) at a power-on reset and that cooperates with the hash-value counting stage (20), and in that the hash-value counting stage (20) can be set to a starting hash value (SHV) by means of the power-on-reset signal (POR).

15 10. A circuit (2) as claimed in claim 6, characterized in that the hash-value generating means (20) provided in the integrated circuit (2) are implemented with the help of a random number generator.

20 11. A transponder (1), characterized in that the transponder (1) is provided with an integrated circuit (2) as claimed in any of claims 6 to 10.